38

 $\Delta 6$ -acetylenase and  $\Delta 6$ -desaturase from Ceratodon purpureus

Abstract

5

The present invention relates to a process for preparing unsaturated fatty acids and to a process for preparing triglycerides with an increased content of unsaturated fatty acids. The invention further relates to the use of DNA sequences coding for  $\Delta 6$ -acetylenase/ $\Delta 6$ -desaturases or  $\Delta 6$ -desaturases for producing a transgenic organism, preferably a transgenic plant or a transgenic microorganism with increased content of fatty acids, oils or lipids with  $\Delta 6$  triple bonds and/or  $\Delta 6$  double bonds.

15 The invention additionally relates to an isolated nucleic acid sequence; to an expression cassette comprising a nucleic acid sequence, a vector and organisms comprising at least one nucleic acid sequence or expression cassette. The invention additionally relates to unsaturated fatty acids and triglycerides with an

20 increased content of unsaturated fatty acids and the use thereof.

25

30

35

40

45